

Rabbit anti-Human Collagen XIIalpha 1 Polyclonal Antibody | anti-COL12A1 antibody

Collagen XIIalpha 1 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA321220	Rabbit	Human	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry

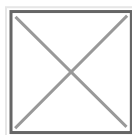
PRODUCT SYNONYMS

Collagen XIIalpha 1; Polyclonal Antibody; Collagen XIIalpha 1 Antibody; BA209D8.1; COCA1; COL12A1; COL12A1L; Collagen alpha-1(XII) chain; collagen type XII proteoglycan; collagen; type XII; alpha 1; DJ234P15.1; anti-COL12A1 antibody

PRODUCT SPECIFICATIONS

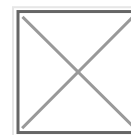
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	IgG
Specificity	Collagen XIIalpha 1 antibody detects endogenous levels of Collagen XIIalpha 1
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	3063
Applicable Applications for anti-COL12A1 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry)
Immunogen	A synthesized peptide derived from human Collagen XIIalpha 1
Subcellular Location	Secreted
Tissue Specificity	Found in collagen I-containing tissues: both isoform 1 and isoform 2 appear in amnion, chorion, skeletal muscle, small intestine, and in cell culture of dermal fibroblasts, keratinocytes and endothelial cells. Only isoform 2 is found in lung, placenta, kidney and a squamous cell carcinoma cell line. Isoform 1 is also present in the corneal epithelial Bowman's membrane (BM) and the interfibrillar matrix of the corneal stroma, but it is not detected in the limbal BM.
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IHC (Immunohistochemistry)

AAA321220 at 1/100 staining human Skeletal muscle tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



IF (Immunofluorescence)

AAA321220 staining U-2 OS cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody, diluted at 1/600, was used as secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-COL12A1 antibody	<p>Description: This gene encodes the alpha chain of type XII collagen, a member of the FACIT (fibril-associated collagens with interrupted triple helices) collagen family. Type XII collagen is a homotrimer found in association with type I collagen, an association that is thought to modify the interactions between collagen I fibrils and the surrounding matrix. Two transcript variants encoding different isoforms have been identified for this gene.</p> <p>Function: Type XII collagen interacts with type I collagen-containing fibrils, the COL1 domain could be associated with the surface of the fibrils, and the COL2 and NC3 domains may be localized in the perifrillar matrix.</p> <p>Subunit Structure: Trimer of identical chains each containing 190 kDa of non-triple-helical sequences.</p> <p>Post-translational Modifications: The triple-helical tail is stabilized by disulfide bonds at each end. Hydroxylation on proline residues within the sequence motif, GXPG, is most likely to be 4-hydroxy as this fits the requirement for 4-hydroxylation in vertebrates. Isoform 1 O-glycosylation; glycosaminoglycan of chondroitin-sulfate type.</p> <p>Similarity: Belongs to the fibril-associated collagens with interrupted helices (FACIT) family.</p>
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NCBI AND UNIPROT INFORMATION

NCBI GI #	93141047
NCBI GeneID	1303
NCBI Accession #	NP_004361.3
NCBI GenBank Nucleotide #	NM_004370.5
UniProt Accession #	Q99715; O43853; Q15955; Q5VYK1; Q5VYK2; Q71UR3; Q99716
Molecular Weight	Observed: 333 kDa Predicted: 334 kDa
NCBI Official Full Name	collagen alpha-1(XII) chain long isoform
NCBI Official Synonym Full Names	collagen type XII alpha 1 chain
NCBI Official Symbol	COL12A1
NCBI Official Synonym Symbols	UCMD2; BTHLM2; EDSMYP; COL12A1L; BA209D8.1; DJ234P15.1
NCBI Protein Information	collagen alpha-1(XII) chain
UniProt Protein Name	Collagen alpha-1(XII) chain
UniProt Gene Name	COL12A1
UniProt Synonym Gene Names	COL12A1L

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.